

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB2004/005137

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 E21B43/10 E21B17/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED  
Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim No.
Category *	Citation of document, with indication, where appropriate, of the relevant passages	
X	US 2002/079106 A1 (SIMPSON NEIL ANDREW ABERCROMBIE) 27 June 2002 (2002-06-27) paragraph '0066! figure 10	1-11
X	GB 2 345 308 A (* PETROLINE WELLSYSTEMS LTD; * ASTEC DEVELOPMENTS LIMITED; * WEATHERFO) 5 July 2000 (2000-07-05) page 5, lines 17-24 page 9, lines 13-21 page 11, lines 8-20 page 15, lines 11-21 figure 1	1-11
A	WO 03/050386 A (BAKER HUGHES INCORPORATED) 19 June 2003 (2003-06-19) page 2, lines 15-20	1, 9

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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\*Z\* document member of the same patent family

Date of the actual compilation of the international search

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No  
PCT/GB2004/005137

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002079106	A1 27-06-2002	AU 772327 B2	22-04-2004
		AU 1867900 A	12-07-2000
		AU 772473 B2	29-04-2004
		AU 1868700 A	12-07-2000
		AU 765292 B2	11-09-2003
		AU 1868800 A	12-07-2000
		AU 766855 B2	23-10-2003
		AU 1868900 A	12-07-2000
		AU 772586 B2	29-04-2004
		AU 1876600 A	12-07-2000
		AU 766437 B2	16-10-2003
		AU 1876800 A	12-07-2000
		CA 2356130 A1	29-06-2000
		CA 2356131 A1	29-06-2000
		CA 2356144 A1	29-06-2000
		CA 2356148 A1	29-06-2000
		CA 2356184 A1	29-06-2000
		DE 69922541 D1	13-01-2005
		DE 69922543 D1	13-01-2005
		EP 1505251 A2	09-02-2005
		EP 1147287 A2	24-10-2001
		EP 1141517 A1	10-10-2001
		EP 1141515 A1	10-10-2001
		EP 1144802 A2	17-10-2001
		EP 1151180 A1	07-11-2001
		EP 1141518 A1	10-10-2001
		GB 2383361 A	25-06-2003
		GB 2382832 A , B	11-06-2003
		GB 2383065 A , B	18-06-2003
		WO 0037766 A2	29-06-2000
		WO 0037771 A1	29-06-2000
		WO 0037768 A1	29-06-2000
		WO 0037767 A2	29-06-2000
		WO 0037772 A1	29-06-2000
		WO 0037773 A1	29-06-2000
		GB 2345308 A , B	05-07-2000
		GB 2346632 A , B	16-08-2000
		GB 2346400 A , B	09-08-2000
		GB 2346909 A , B	23-08-2000
		GB 2347445 A , B	06-09-2000
		NO 20012596 A	27-07-2001
		NO 20012597 A	27-07-2001
		NO 20012598 A	30-07-2001
		NO 20012599 A	30-07-2001
		NO 20012600 A	30-07-2001
		NO 20012865 A	07-08-2001
		US 2002195256 A1	26-12-2002
		US 2003019638 A1	30-01-2003
GB 2345308	A 05-07-2000	AU 772327 B2	22-04-2004
		AU 1867900 A	12-07-2000
		AU 772473 B2	29-04-2004
		AU 1868700 A	12-07-2000
		AU 765292 B2	11-09-2003
		AU 1868800 A	12-07-2000
		AU 766855 B2	23-10-2003
		AU 1868900 A	12-07-2000

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No.  
PCT/GB2004/005137

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2345308	A		
		AU 772586 B2	29-04-2004
		AU 1876600 A	12-07-2000
		AU 766437 B2	16-10-2003
		AU 1876800 A	12-07-2000
		CA 2356130 A1	29-06-2000
		CA 2356131 A1	29-06-2000
		CA 2356144 A1	29-06-2000
		CA 2356148 A1	29-06-2000
		CA 2356184 A1	29-06-2000
		CA 2356194 A1	29-06-2000
		DE 69922541 D1	13-01-2005
		DE 69922543 D1	13-01-2005
		EP 1505251 A2	09-02-2005
		EP 1147287 A2	24-10-2001
		EP 1141517 A1	10-10-2001
		EP 1141515 A1	10-10-2001
		EP 1144802 A2	17-10-2001
		EP 1151180 A1	07-11-2001
		EP 1141518 A1	10-10-2001
		GB 2383361 A	25-06-2003
		GB 2382832 A ,B	11-06-2003
		GB 2383065 A ,B	18-06-2003
		WO 0037766 A2	29-06-2000
		WO 0037771 A1	29-06-2000
		WO 0037768 A1	29-06-2000
		WO 0037767 A2	29-06-2000
		WO 0037772 A1	29-06-2000
		WO 0037773 A1	29-06-2000
		GB 2346632 A ,B	16-08-2000
		GB 2346400 A ,B	09-08-2000
		GB 2346909 A ,B	23-08-2000
		GB 2347445 A ,B	06-09-2000
		NO 20012596 A	27-07-2001
		NO 20012597 A	27-07-2001
		NO 20012598 A	30-07-2001
		NO 20012599 A	30-07-2001
		NO 20012600 A	30-07-2001
		NO 20012865 A	07-08-2001
		US 2002195256 A1	26-12-2002
		US 2003019638 A1	30-01-2003

WO 03050386 A 19-06-2003

US 2003107213 A1	12-06-2003
US 2003106618 A1	12-06-2003
AU 2002362049 A1	23-06-2003
CA 2469392 A1	19-06-2003
GB 2399581 A	22-09-2004
WO 03050386 A1	19-06-2003